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JUN - 7 1995

June 7, 1995

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HAND DELIVERY

Mr. William F. Caton  
Acting Secretary  
Federal Communications Commission  
1919 M Street, NW  
Washington, DC 20554

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Re: CC Docket No. 92-297  
Ex Parte Presentation

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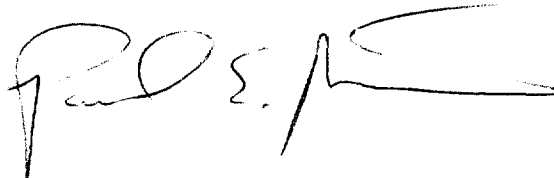
Dear Mr. Caton:

On June 6, 1995, representatives of Texas Instruments, Inc., ("TI") met with Commissioner Rachelle B. Chong and Ms. Jill Luckett and Ms. Jane Mago of her staff; and Ms. Mary McManus and Mr. David Sidall of Commissioner Ness' office; Mr. Gerald Vaughan and Ms. Susan Magnotti of the Wireless Bureau; and Mr. Thomas S. Tycz and Ms. Donna L. Bethea of the International Bureau on matters related to the pending proceeding in CC Docket No. 92-297. TI was represented by Gene Robinson, Bob Pettit, and Paul Misener.

LMDS technology, the status of frequency sharing plans for the 28 GHz band, and LMDS service and auction rules were discussed; copies of the attached materials were presented.

An original and two copies of this letter are enclosed. A copy of this letter (without attachments) is being provided simultaneously to the FCC participants.

Respectfully submitted,



Paul E. Misener  
Counsel for Texas Instruments, Inc.

Attachments

NO. of Copies rec'd 012  
List ABCDE

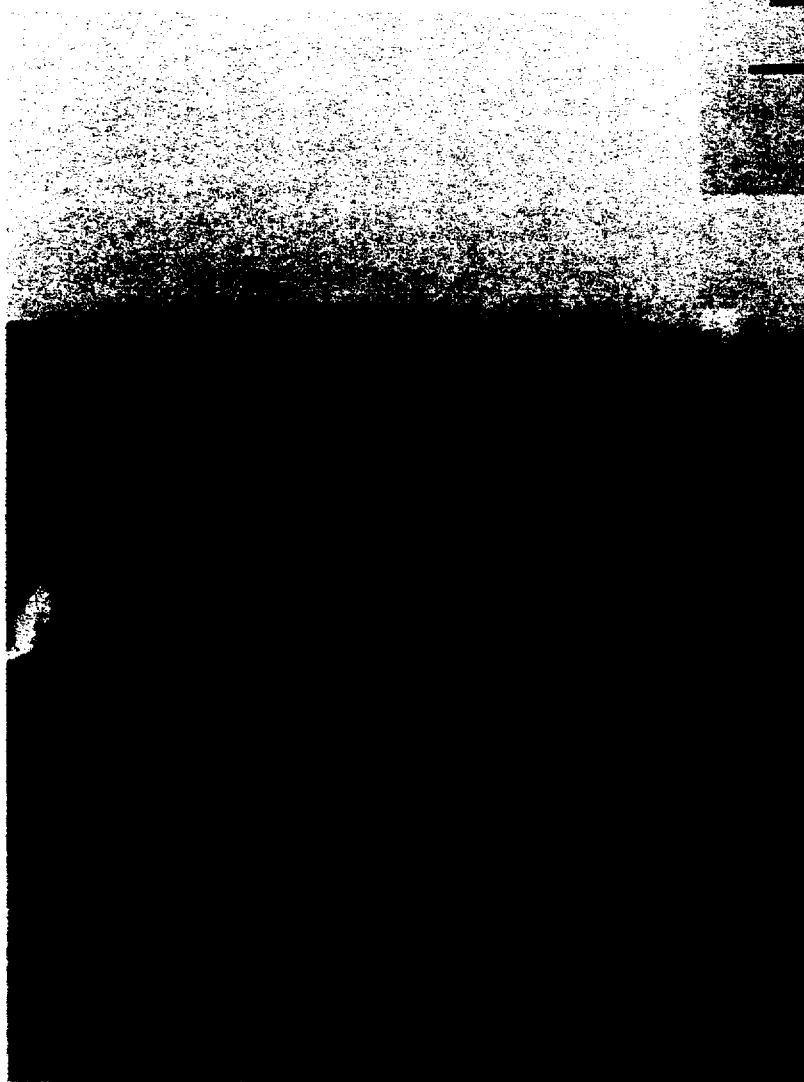
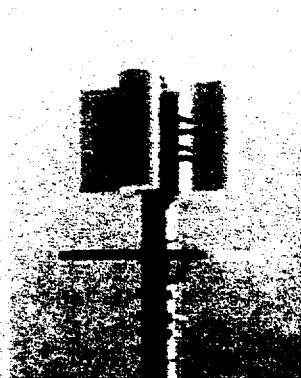
# **Texas Instruments**

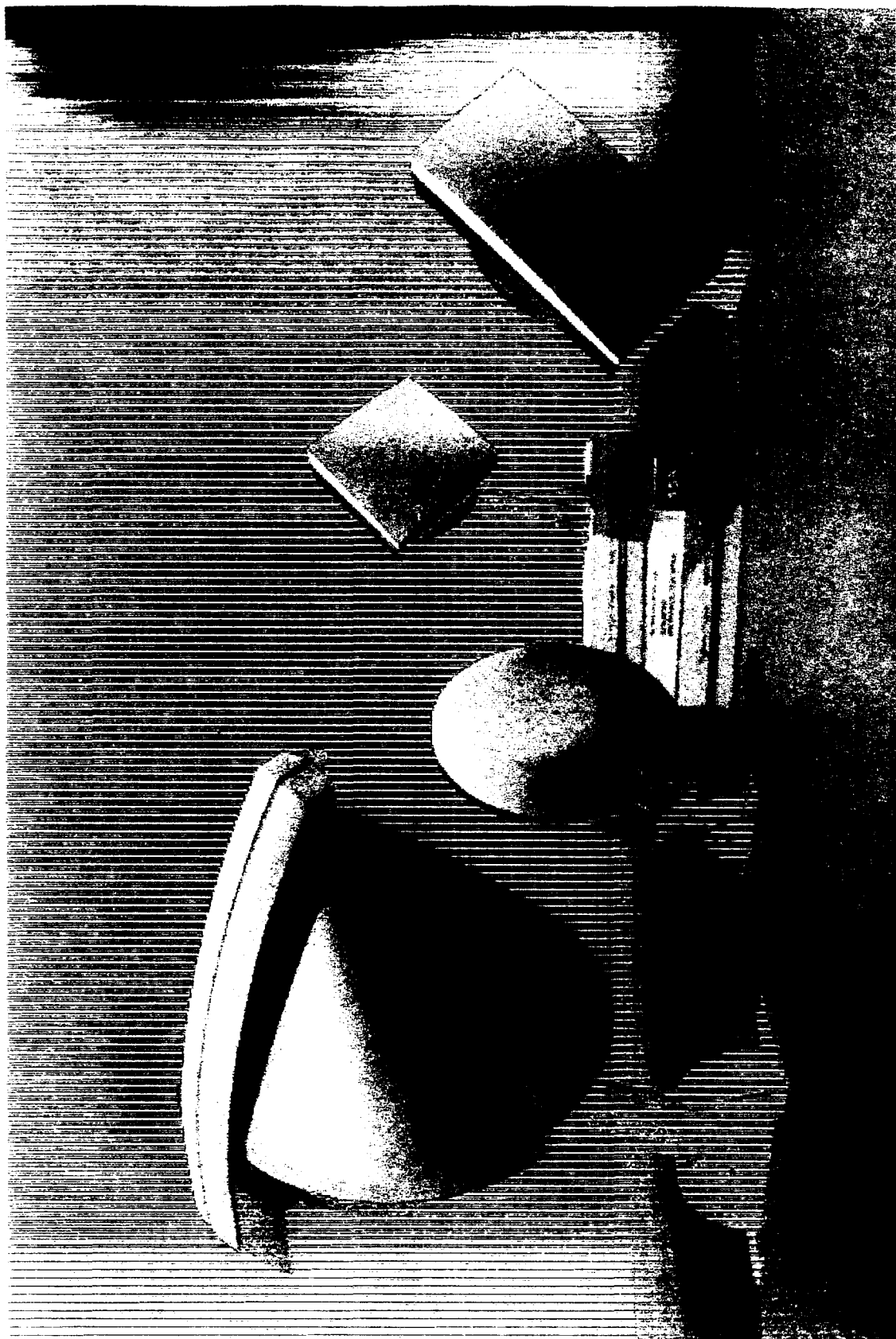
## **LMDS Digital System**

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FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF SECRETARY





APR 1967  
PUBLICATIONS

# **LMDS Service**

Texas Instruments' Flexible Digital LMDS System Enables Simultaneous Provision of Two-Way, High Data Rate Services to Homes, Schools, and Businesses.

For Example:

- 56 Channels of One-Way Video;
- 200 Channels of Video on Demand; and
- 800 Telephone / Interactive Data Circuits.

In Addition to Competition with Cable, Digital LMDS Can Serve as a Wireless Component of the NII.

# **Texas Instruments LMDS**

- The proposed 28 GHz Local Multipoint Distribution Service (LMDS) is based on state-of-the-art transmission technology developed by Texas Instruments and others.
- This LMDS will enable near-term, relatively inexpensive, delivery of multichannel video and other broadband digital information services to homes, schools and businesses.
- LMDS presents many public interest benefits, including competition with cable TV service, and substantial manufacturing and export opportunities for Texas-based and other American companies.

# **Texas Instruments LMDS**

- In late 1992, the FCC initiated a proceeding to establish frequency allocations and rules for 28 GHz LMDS and, in mid-1994, chartered an industry advisory committee to address spectrum sharing issues in the band.
- Other proposed services for 28 GHz include low earth orbit (LEO) and geostationary orbit (GEO) satellite systems.
- Although a plan was developed for LMDS to share the 28 GHz band with mobile-satellite service “feeder links” for Motorola’s Iridium system, the committee disbanded after failing to reach a solution for accommodating LMDS and other proposed satellite systems.

# **Texas Instruments LMDS**

- In response to an informal request from FCC staff, Texas Instruments initiated discussions this spring with representatives of the other proposed 28 GHz services.
- TI succeeded in drafting a band plan which Texas Instruments jointly filed with Teledesic (a proponent of a LEO satellite system) and Hughes (a proponent of a GEO system).
- Boeing and Hewlett-Packard also have endorsed Texas Instruments' plan.



# BAND PLAN

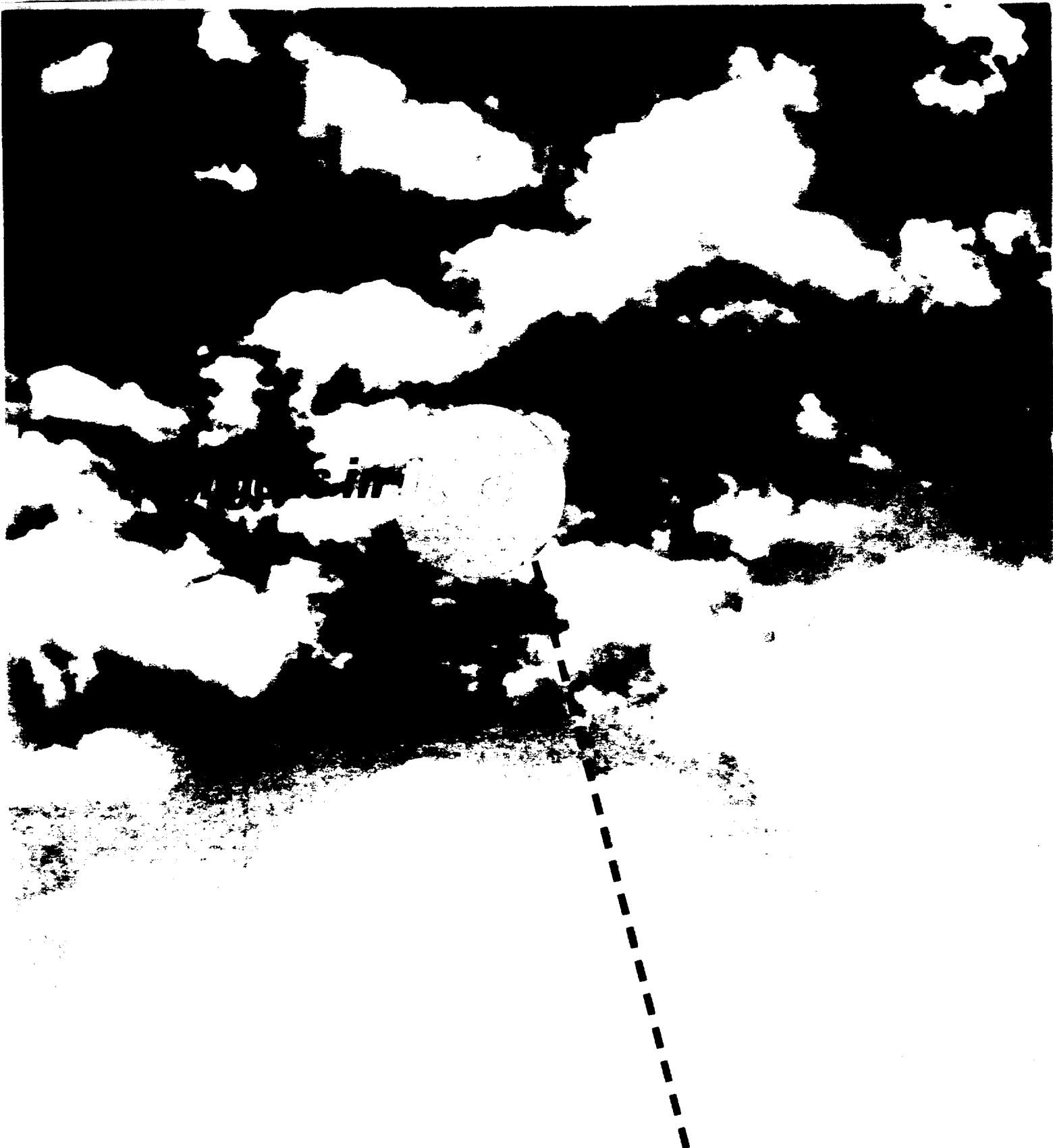
Services	
27.5	LOCAL MULTIPOINT DISTRIBUTION SERVICE Fixed-Satellite Service
28.0	FIXED-SATELLITE SERVICE (Non-GEO) Fixed-Satellite Service (GEO) Fixed
28.5	FIXED-SATELLITE SERVICE (GEO) Fixed-Satellite Service (Non-GEO) Fixed
29.0	FIXED-SATELLITE SERVICE (Non-GEO MSS Feeder Links) LOCAL MULTIPOINT DISTRIBUTION SERVICE
29.5	FIXED-SATELLITE SERVICE (GEO) Fixed-Satellite Service (Non-GEO)
30.0	

\*PRIMARY/CO-PRIMARY ALLOCATIONS - CAPITALIZED

Secondary Allocations - Non-Capitalized

# SUMMARY

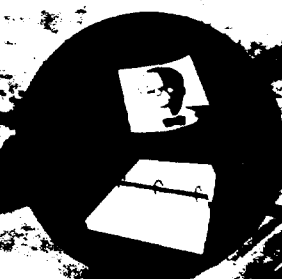
- The Texas Instruments LMDS System is a 28 GHz broadband wireless system capable of providing  
VIDEO, (Interactive and Video on Demand)  
DIGITAL, and  
TELEPHONY
- LMDS needs 1 GHz of 28 GHz spectrum for broadband wireless operations.
- Texas Instruments believes the broadest possible participation in the auction for 28 GHz/LMDS should be allowed.
- Adoption of auction and service rules that do not exclude any potential LMDS service providers would support the public interest.
- Completion of the band plan and domestic allocation should be accomplished before the 1995 ITU World Radiocommunication Conference.



**The best bottom line – 2-way digital LMDs  
from Texas Instruments – no strings attached.**



Video on demand



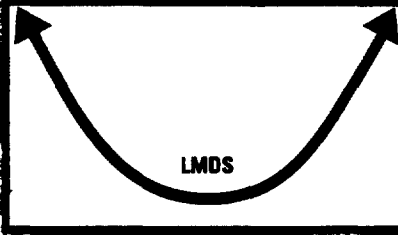
## Down town and still getting the better service

In urban

Tall buildings and dense populations provide excellent environments for fiber optics and repeaters. The holes in the coverage are minimized. Antennas receive signals directly into the connection. The result is a high quality service.

Technology is the key to the success of the service. You can achieve a high level of service — almost overnight — in the growth underserved areas.

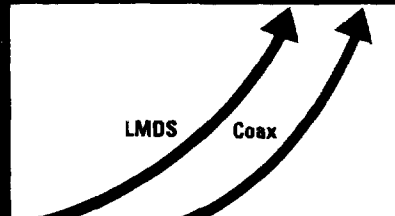
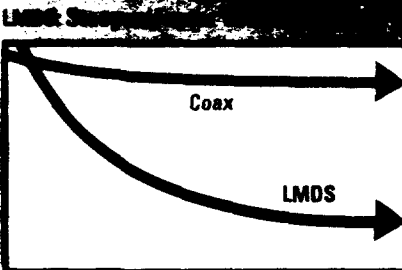
Cost Advantage  
vs. Coax



# The proof is in the details.

can be deployed over a broadband digital infrastructure. You can move it, expand it, reconfigure it, tailor it to meet the needs of your ever-changing marketplace. Lower fixed costs make you less susceptible to market fluctuations, while helping you generate higher returns from the very start.

And it also makes your business more financially viable.



## Compare for yourself. Or let us help.

At a glance, LMDS delivers significant advantages over hybrid fiber coax systems currently available.

We'll gladly help you conduct an integrated field trial. Or we can help you analyze your business model. Best yet, we can support your team with the wealth of data we've collected in our own evaluations.

	LMDS	Coax
Capacity	+	-
Bandwidth	+	-
Speed	+	-
Reliability	-	+
Scalability	+	-
Cost of Service	+	-
Power Efficiency	+	-
Operational Simplicity	+	-
Physical Footprint	+	-
Operational Flexibility	+	-
Maintenance Costs	+	-
= Advantage: LMDS		



*Video conferencing*

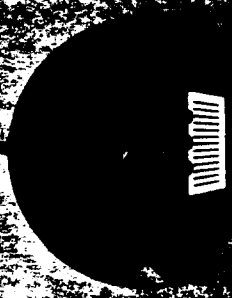


*Interactive video games*

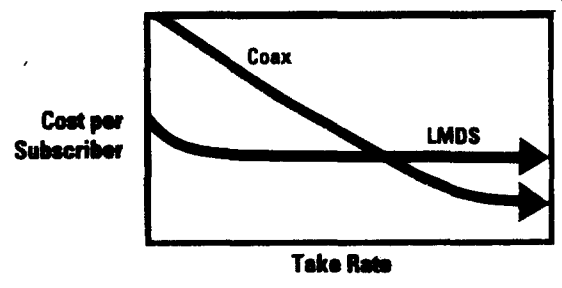
## Why Texas Instruments?

We're building on our core competencies in systems design and integration — coupled with decades of experience in advanced millimeter wave technology and unequalled experience in designing and producing broadband systems — to help you get to market first with proven, revenue-generating technologies. Our LMDS solution can help put you in the lead on the Information Superhighway now, ahead of the competition.

LMDS is flexible, scalable, and cost-effective. A viable alternative to other broadband technologies, LMDS offers a wide range of services to schools and homes. Consider LMDS for your school's needs. LMDS offers multiple deployment options, including broadband video, which is ideal for hybrid fiber coax networks. LMDS also provides fast, easy access to long distance providers, as well as having broadband campus networking capabilities.



LMDS: Lower Cost/Subscriber Advantage



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Texas Instruments  
Communications & E

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GO

Texas Instruments, headquartered in Dallas, Texas, is a leading developer and manufacturer of semiconductors, defense systems, software productivity tools, consumer products, electrical controls and metallurgical materials. In addition to facilities across the continental United States, the company currently operates in more than 30 countries spanning five continents. TI's Defense Systems and Electronics Group won the 1992 Malcolm Baldrige Quality Award.